TM 11-2300-459-14&P-4

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-1810/VRC-47 (NSN 5820-01-022-3333) AND DIFFERENCE KIT (NSN 5820-01-022-6288) FOR RADIO SET AN/VRC-47 AND INSTALLATION KIT, REMOTE AUDIO MK-1870/VRC-47 (NSN 5820-01-049-1018) IN TRUCK UTILITY, 1 1/4 TON, M882 OR M892

HEADQUARTERS, DEPARTMENT OF THE ARMY
14 MAY 1980

WARNING

When drilling near the gas tank, observe the following precautions to prevent an explosion that could result in damage to equipment and/or loss of life.;

a. Drill only in an adequately ventilated area.
b. Using your sense of sight and smell, insure that neither gasoline nor gasoline fumes are escaping from the tank.
c. Insure that all electrical equipment, including the drill, is properly grounded.
d. Avoid puncturing the tank by using either of these techniques:
   Insert a section of tubing or pipe over the drill bit, or insert a block of wood between the drill and the floor or panel being drilled, to insure that the bit does not penetrate more than 1/8-inch beyond the floor or panel and into the gas tank.

WARNING

When performing continuity checks avoid the hazard of electrical shock by disconnecting the power cable from side of power junction box.

WARNING

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE disdolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

Technical Manual
No. 11-2300-459-14&P-4

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, *1978*

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-1810/VRC-47 (NSN 5820-01-022-3333) AND DIFFERENCE KIT (NSN 5820-01-022-6288) FOR RADIO SET AN/VRC-47 AND INSTALLATION KIT, REMOTE AUDIO MK-1870/VRC-47 (NSN 5820-01-049-1018) IN TRUCK UTILITY, 1 1/4 TON, M882 OR M892

Current as of 15 April 1980

REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 (Test) located in the back of the manual. Simply tear out the self addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Form 2028-2 (Test) in the back of your manual, use the standard DA Form 2028(Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703.

In either case a reply will be furnished direct to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual provides instructions for installing Installation Kit, Electronic Equipment MK-1810/VRC-47 (NSN 5820-01-022-3333) or Difference Kit (NSN 5820-01-022-6288) and Installation Kit, Electronic Equipment (Remote Audio Kit MK-1870/VRC-47 NSN 5820-01-049-1018).

a. Installation Kit MK-1810/VRC-47 contains items required to install Radio Set AN/VRC-47 in Truck, 1 1/4 ton, M882 or M892.

b. Difference Kit (NSN 5820-01-022-6288) contains items required to transfer an existing vehicular installation of Radio Set AN/VRC-47 to Truck, 1 1/4 ton, M882 or M892.

c. Remote Audio Kit MK-1870/VRC-47 contains items required to allow Remote Audio operations in Truck, 1 1/4 ton, M882 or M892.

1-2. Indexes of Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, change, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are Modification Work Orders (MWOs) pertaining to the equipment.

1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. Report of Packaging and handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DSAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610. 33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

1-4. Administrative Storage

When placing or removing MK-1810/VRC-47 Installation Kit into or from administrative storage, perform PMCS in accordance with TM 11-5820-520-12.

1-5. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

1-6. Reporting Equipment Improvement Recommendations (EIR's)

If your MK-1810/VRC-47 needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

1-7. Disposition of Parts

Dispose of unused parts in accordance with DOD 4160-.21-M-1 and AR 755-2.

Section II. DESCRIPTION

1-8. Purpose and Use

The MK-1810/VRC-47 is a grouping of items used to modify Truck, Utility, 1 1/4 Ton, M882 or M892 for the installation of Radio Set AN/VRC-47.

1-9. Description of Components

The installation kit is made up of the components listed below. Attaching hardware is enclosed in a bag and fastened to the item it attaches.

a. Mounting, MT-1029/VRC (fig. E-1). Mounting MT-1029/VRC is shock mounted base unit for Radio Set AN/VRC-47.

b. Mounting, MT-1898/VRC (fig. E-1). Mounting MT-1898/VRC is a shock mounted base unit for Receiver R-442/VRC.

c. Control, Radio Set C-2299/VRC (fig. E-2). Control C-2299/VRC enables the receiver-transmitter to perform automatic retransmission of sig-

nals at a radio relay site.

d. Cables (fig. E-1 and E-2). Cables are used to carry signals and power to various radio sets. All cables are made in specific lengths.

e. Mounting Hardware (E-1). Bracket assembly, nuts, bolts, etc.

f. Microphone, Dynamic M-80C/U (item 32, fig. E-1).

g. Headset, Electrical H-251B/U (item 31, fig. E-1).

h. Loudspeaker, Permanent Magnet LS-454/U (item 10, fig. E-2).

CHAPTER 2

SERVICE UPON RECEIPT AND INSTALLATION

Section I. GENERAL

2-1. Unpacking

a. Packaging Data. When packed for shipment the components of the installation kit and difference kit are packed in individual cartons. All cartons are usually packed in a large cardboard carton which may or may not be installed inside a wooden packing crate. When packed for overseas shipment the cardboard carton is enclosed in a moistureproof paper.

b. Removing Contents. Unpack the equipment from the case as follows:

CAUTION

Do not pry open case with prybar or crowbar. Equipment within case may be damaged.

(1) Cut and fold back any metal straps around wooden packing case.

(2) Remove nails from cover and one side of wooden packing case.

(3) Remove cover and one side.

(4) Open moistureproof barrier cover in outer carton and remove carton from case.

(5) Open carton and moistureproof barrier covering inner carton.

(6) Remove inner carton and open.

(7) Remove contents from inner carton. Save cartons, inner blocking, filler, etc, for future limited storage of the installation kit.

2-2. Checking Unpacked Equipment

a. Inspect the equipment for damage incurred during shipment. If any damage is found, report on DD Form 6 (para 1-3*b*).

b. See that the installation kit supplied is complete as listed on the packing slip. If a packing slip is not available, check the kit against the list of kit items in Appendix E. Report all discrepancies in accordance with TM 38-750. Shortage of a minor assembly or spare part which does not affect usage should not prevent installation and use of the kit.

2-3. Preparation for Installation

To perform the installation of the MK-1810/VRC-47 a suitable site must be selected. The installation procedure calls for holes to be drilled in the vehicle, therefore, electric power should be available to operate an electric drill and provide lighting if necessary.

2-4. Tools and Equipment Required

The following tools and equipment are required for installation of Kit MK-1810/VRC-47 and also the difference kit.

a. Tool Kit, Electronic Equipment TK-100/G.

b. 9/32 inch drill bit with 1/4 inch shank. NSN 5133-00-889-1975

c. 11/32 inch drill bit with 1/4 inch shank. NSN 5133-00-889-1905

d. 2 1/8 inch hole saw (or equivalent) with 1/4 inch shank. NSN 3455-00-187-2630

Section II. INSTALLATION PROCEDURE

2-5. General

a. Before installing the MK-1810/VRC-47 follow the instructions below to aid in installation.

WARNING

When drilling near the gas tank, observe the following precautions to prevent an explosion that could result in damage to equipment and/or loss of life.

a. Drill only in an adequately ventilated area.

b. Using your sense of sight and smell, insure that neither gasoline nor gasoline fumes are escaping from the tank.

c. Insure that all electrical equipment, including the drill, is properly grounded.

d. Avoid puncturing the tank by using either of these techniques: Insert a section of tubing or pipe over the drill bit, or insert a block of wood between the drill and the floor or panel being drilled, to insure that the bit does not penetrate more than 1/8-inch beyond the floor or panel and into the gas tank.

(1) Insure that vehicle is close to power source for operation of electrical equipment.

(2) Move kit close to where equipment will be installed.

(3) Remove all burrs and sharp edges after drilling, and remove metal shavings and chips from vehicle.

b. Read and follow instructions and figures carefully.

NOTE

When vehicles with radio sets are turned in or transferred, the radio set and installation kit will be removed and reinstalled in the new vehicle using a difference kit.

2-6. Installation of Kit

Install the radio equipment as follows:

a. Identify all parts and components of the kit using Appendix E and figures FO-1 and E-2.

b. Perform all drilling as described below:

(1) Drill a 11/32-inch hole for ground strap of Antenna AS-1729/VRC as shown in figure 2-1.

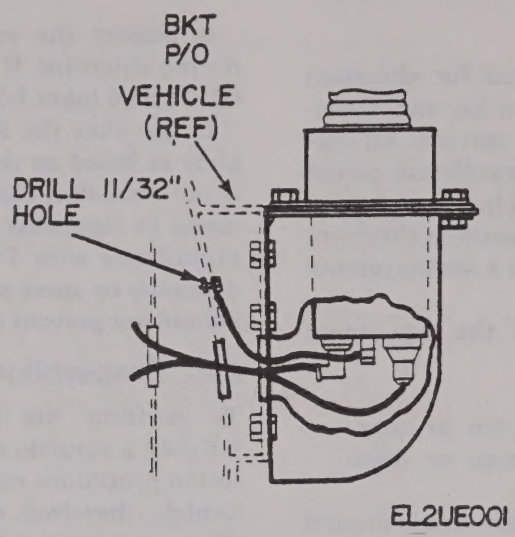

Figure 2-1. Grounding antenna base to truck.

(2) Using audio accessory support kit (12) as a template mark and drill two 9/64 inch holes as shown in figure 2-2. Secure microphone hook to equipment rack with hardware supplied. Microphone hook can be placed at discretion of user.

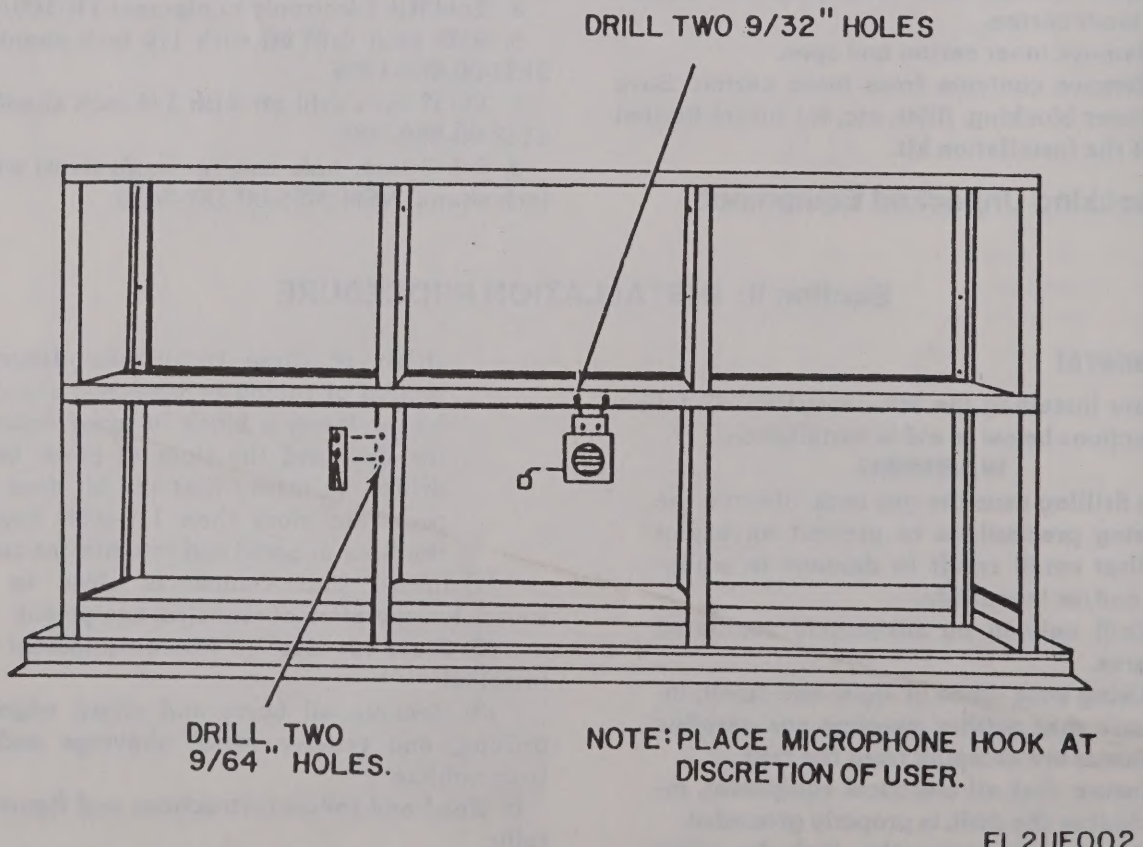

Figure 2-2. Attaching Audio Accessory Kit.

c. Remove the five cap screws used to secure top tray of Mounting MT-1029/VRC (24) to shock mounts and remove ground straps from top tray.

d. Position lower portion of Mounting MT-1029/VRC (24) in the equipment rack (fig. FO-1) and fasten in position using items 10, 11, and 18.

e. Assemble connector adapter (28) and connector plug (29) to cable assembly CX-4720/VRC (27). Connect one end of cable (27) to J-21 (upper tray) of mounting MT-1029/VRC ( ). Connect the other end of the cable to the top of the power junction box (See figure 2-6 and FO-1).

f. Connect Cable Assembly, Special Purpose CX-4721/VRC (26) to J23 of MT-1029/VRC.

g. Reinstall upper tray of MT-1029/VRC, remove in *c* above, to shock mounts. Insure that grounding straps are securely fastened.

h. Remove the four cap screws and washers used to secure top tray of Mounting MT-1898/VRC (9) to shocks and remove the connections of the grounding straps to the top tray.

i. Remove the top tray of mounting.

j. Position lower portion of Mounting MT-1898/VRC in the installation rack (fig. FO-1) and fasten in position items 10, 11, and 18.

k. Attach Cable Assembly, Special Purpose CX-4721/VRC (26) (step *f* above) to J11 of MT-1898/VRC.

l. Replace the top tray to MT-1898/VRC and fasten in position using cap screws and washers removed in *j* above. Insure that grounding strap is securely fastened.

m. If the radio sets, (Receiver-Transmitter AN/VRC-524 and Receiver R-442/VRC) are to be installed, insure that the power switch is in the OFF position and install them in their proper mounting.

2-7. Installation of Antennas

a. Antenna AS-1729/VRC.

(1) Fasten support assembly (6) to interface bracket (curbside front) using items (11 and 15) and install grommet materiel (7 and 8) as shown in figure 2-3.

NOTE

If Antenna AT-912/VRC is to be installed on truck M882 or M892, use existing hardware and install antenna and antenna guard as shown in figure FO-2.

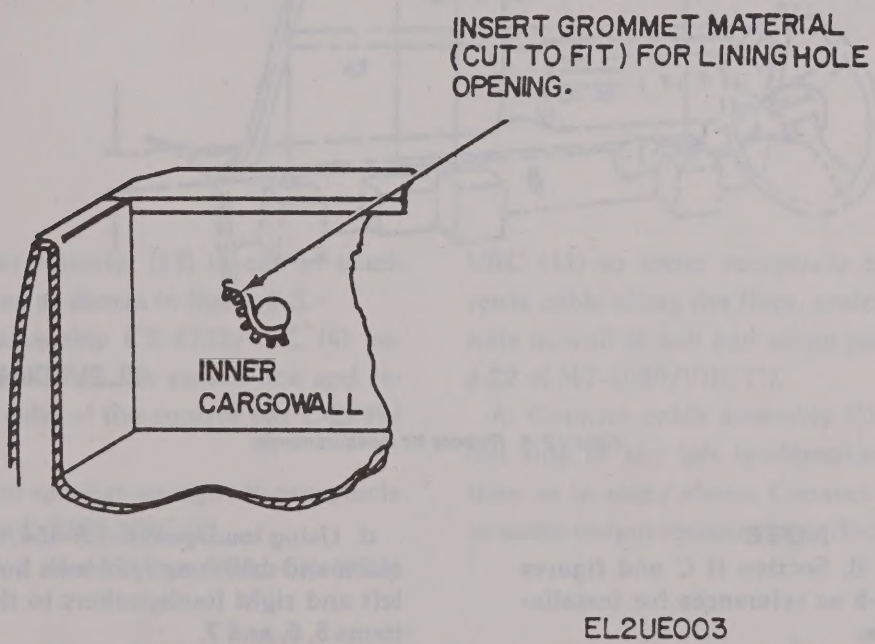

Figure 2-3. Installation of grommet materiel.

(2) Fasten base of Antenna AS-1729/VRC to support assembly (6) using items 11 and 15. Attach antenna tip (1) to antenna sections and secure antenna sections to antenna base.

(3) Connect Cable Assembly, RF CG-1773/U (25) and Cable Assembly. Special Purpose CX-4722/VRC (20) to correct receptacles on Antenna AS-1729/VRC. (See fig. 2-6).

(4) Attach one end of the bond strap to the threaded boss on the matching unit using hardware

supplied. The remaining end is connected to the truck sidewall.

(5) Route cables CX-4722/VRC (20) and CG-1773/U (25) along rack (fig. FO-1 and 2-6) and connect to Receiver-Transmitter RT-524/VRC.

b. Mast Base AB-15/GR.

(1) Fasten support assembly (6, fig. FO-1) to interface bracket (roadside rear) using items 11 and 15, and install grommet material (7 and 8) as shown in figure 2-3.

(2) Fasten adapter assembly (14) and Mast Base AB-15/GR (13) to support assembly (6) using items 10, 11, and 18.

(3) Attach antenna elements 21, 22 and 23 to Mast Base AB-15/GR.

(4) Connect Cable Assembly CG-1773B/U)16) to ANT connection on R-422/VRC. Route it through the rack, and along the clips installed on the truck sidewall (fig. FO-1).

(5) Route cable through hole in truck sidewall support assembly and connect to antenna.

c. After all components are mounted and all cables are properly routed and connected, remove the power cable from the dummy connector (curbside in cargo area) and connect it to the side of the power junction box.

d. Upon completion of installation of the MK-1810/VRC-47 recheck tightness of all bolts, nuts, and screws. Dress and secure cables to equipment rack using clamp strap kit (30). Touchup paint all bare spots where holes were drilled. (See paragraph 3-9).

e. Items when not in operation will be stored in accordance with organizational procedures, or disposed of in accordance with DOD 4160-.21-M-1 and AR 755-2.

2-8. Installation of Remote Kit MK-1870/VRC-47

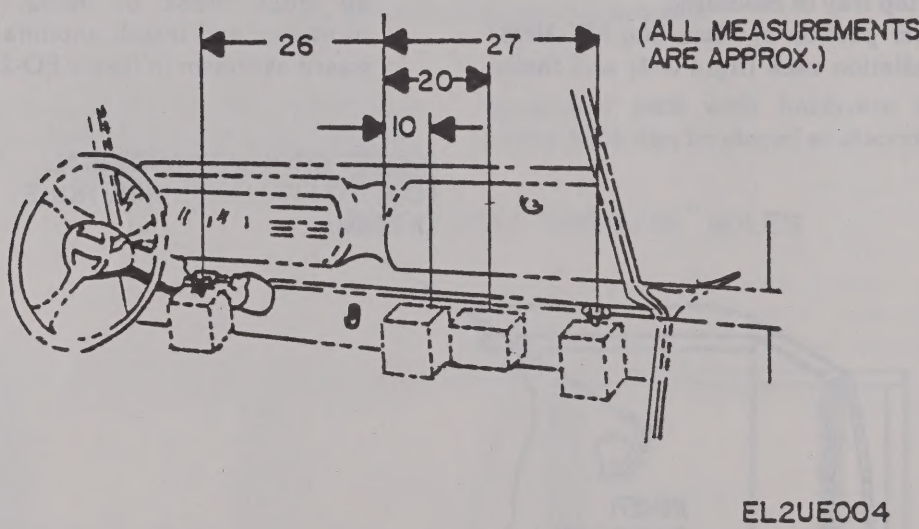

Figure 2-4. Remote kit measurements.

NOTE

Use Appendix B, Section II C and figures 2-4, 2-5 and 2-6 as references for installation procedures.

a. Remove chrome strip from dashboard (if present) as all drilling will be done across this area.

b. Using switchbox assembly (3) as a template mark and drill two 9/32 inch holes and secure the switchbox to the dashboard using items 5, 6, and 7.

c. Using control C-2299/VRC (9) as a template mark and drill two 11/32 inch holes and secure the control box to the dashboard using hardware supplied with the control box.

d. Using loudspeaker LS-454/U (10) as a template mark and drill four 9/32 inch holes and secure both left and right loudspeakers to the dashboard using items 5, 6, and 7.

e. Using the Audio Accessory Support Kit (8) as a template mark and drill two 9/64 inch holes and secure microphone hook to dashboard using hardware supplied with the kit. (Positioning of microphone hook is left to users discretion.)

f. On the forward cargo panel (fig. 2-5) mark and drill a 2 1/8 inch hole through the panel and the cab of the vehicle.

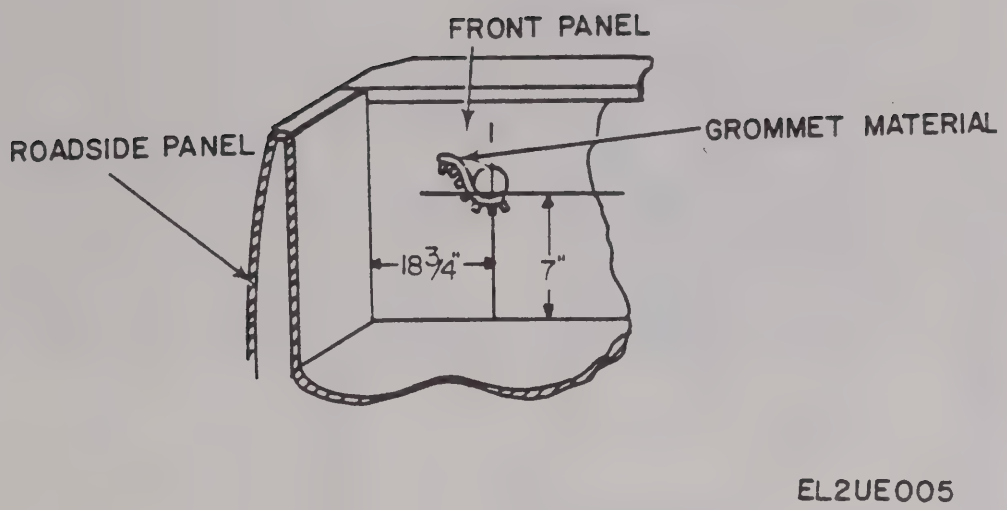

Figure 2-5. Forward cargo panel measurements.

g. Insert grommet material (13) in cab of truck and (15) in cargo area as shown in figure 2-3.

h. Install cable assembly CX-4723/VRC (4) between the top receptacle on the switch box and receptacle J-701 (left side) of the control box C-2299/VRC (9).

i. Connect cable of speaker on right to receptacle J-704 on control box C-2299/VRC (9).

j. Connect one end of cable assembly CX-4723/VRC (11) to lower receptacle on switch box and route cable along the floor, under the seat, through hole in wall of cab and cargo panel and connect to J-22 of MT-1029/VRC ( ).

k. Connect cable assembly CX-7867/VRC (2) to left side of the left loudspeaker and route along floor as in step *j* above. Connect other end of cable to audio output receptacle on Receiver R-442.

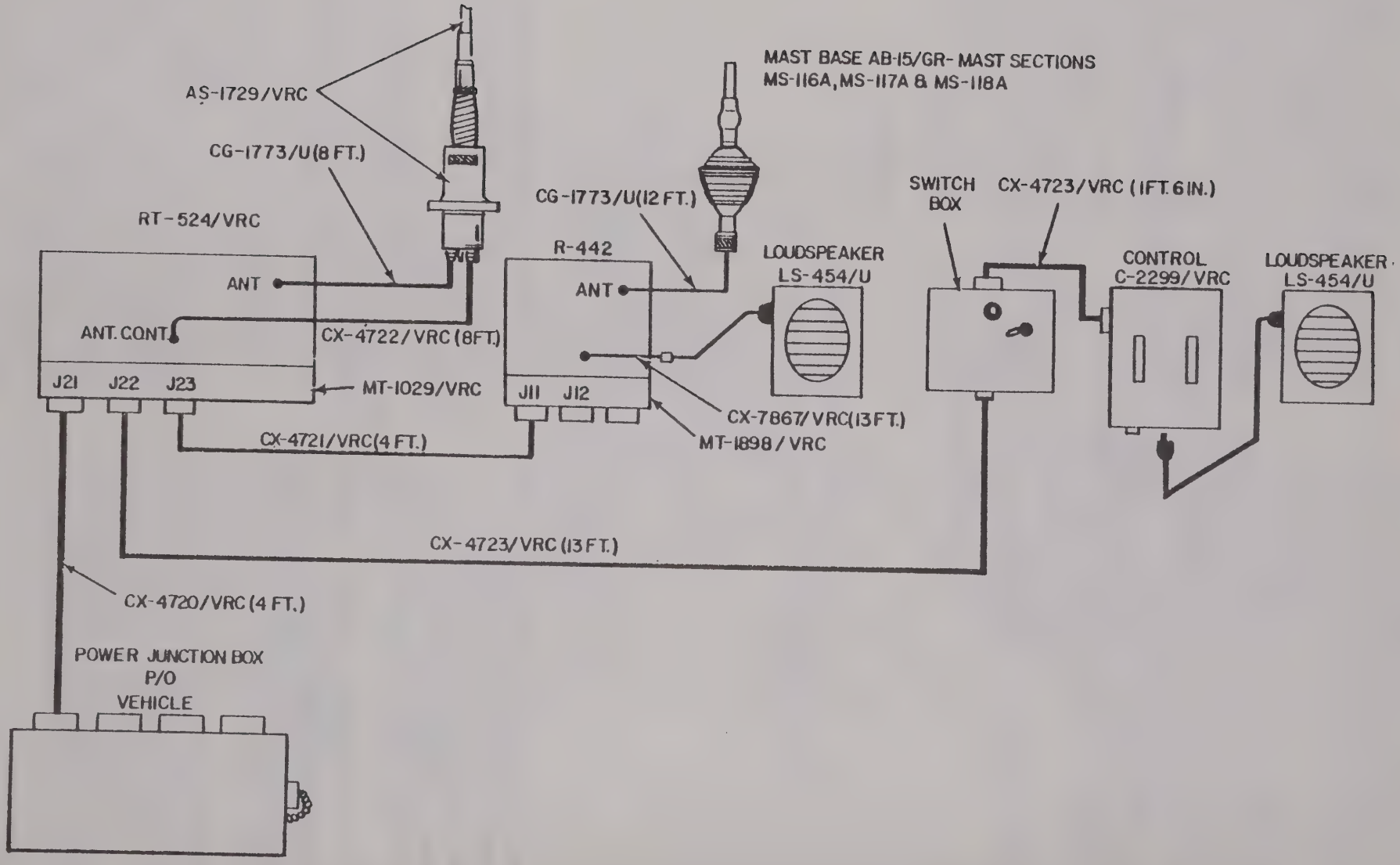

Figure 2-6. Cabling Diagram for AN/VRC-27 in truck, 1 1/4 ton M882 or M892.

l. Clamp cables to floor with sheet metal screw clamp kit (12).

m. Clamp cables to dashboard using clamp strap kit (1).

n. Use plastic tiedown strapping (14) to secure cables to equipment rack.

o. On top of Mounting MT-1029/VRC loosen the six screws and remove the cover. When power fed through the mounting is turned on and off by remote control, position the mounting link between the center terminal and terminal E-22.

p. On top of Mounting MT-1898/VRC loosen the six screws and remove the cover. Position the right mounting link to terminal E-12.

q. Upon completion of installation of the kit, recheck tightness of all nuts, bolts, and screws. Touchup paint all bare spots where holes were drilled. (See paragraph 3-9.)

r. Remove power cable from dummy connector (curbside in cargo area) and connect it to the junction box.

2-9. Difference Kit MK-1810/VRC-47

a. Item comprising Difference Kit MK-1810/VRC-47 (NSN 5820-01-022-6288) can be identified by using Appendix E.

b. Items of the MK-1810/VRC-47 are packed separately. This kit contains the items required to transfer an existing vehicular installation of Radio Set AN/VRC-47 to truck 1 1/4 Ton M882 or M892.

c. The Difference Kit will be stored in accordance with organizational procedures.

d. Follow instructions in steps 2-6 and 2-7 for installation of the Difference Kit.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

Section I. OPERATOR'S MAINTENANCE

3-1. Scope of Operator's Maintenance

Operator's maintenance consists of cleaning and inspection. The person performing maintenance checks will observe the following instructions.

3-2. Material Required for Maintenance (See Appendix F)

a. Cleaning cloth.
b. Trichlorotrifluoroethane
c. Soft brush.

3-3. Preventive Maintenance

Preventive maintenance is the systematic maintenance, inspection, and servicing to insure equipment serviceability and reduce downtime.

a. Systematic Maintenance. The procedures given in paragraph 3-4 are essential to the upkeep of the installation kit items. Cleaning operations (para 3-5) should be performed as required. When equipment is not used daily, cleaning operations shall be performed before operation, after extended use or once a week when equipment is kept in a standby condition.

b. Preventive Maintenance Service and Inspection. The preventive maintenance checks and services charts (TM 11-5820-401-12) outline inspections to be made at specific intervals. These are made to maintain the equipment in good general (physical) and operating condition. Records and reports of these inspections must be made in accordance with TM 38-750.

3-4. Maintenance Checks and Service Periods

TM 11-5820-520-12 specifies checks and services that must be accomplished daily or under special circumstances listed below.

a. When equipment is initially installed.
b. When equipment is reinstalled after relocation.
c. At least once a week if the equipment is maintained in a standby condition.

3-5. Cleaning

Inspect all components of the installation kit. All exterior surfaces must be free of dust, dirt, grease and fungus.

a. Remove dust and dirt with a clean soft cloth.

WARNING

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

b. Remove grease, ground-in dirt and fungus from the equipment using a dampened (not wet) cloth with Trichlorotrifluroroethane

c. Clean cables with a soft cloth. If necessary use a dampened cloth with a mild soap to remove dirt from cables.

Section II. ORGANIZATIONAL MAINTENANCE

3-6. Scope of Organizational Maintenance

This section contains instructions covering organizational maintenance of the kit. Organizational maintenance includes:

a. Quarterly preventive maintenance.
b. Touchup painting.
c. Cable troubleshooting and repair.

3-7. Tools and Materials Required (See Appendix F)

a. Tool Kit, Electronic Equipment TK-101/G.
b. Multimeter AN/URM-105.
c. Cleaning cloth.
d. Trichlorotrifluoroethane

3-8. Quarterly Preventive Maintenance

Quarterly maintenance will be scheduled in accordance with the requirements of TM 38-750. All deficiencies will be noted and recorded, and those not corrected during inspection and service will be reported immediately to a higher maintenance category by use of forms and procedures specified in TM 38-750. Daily services constitute a part of the

quarterly maintenance checks and must be performed concurrently. Perform all checks and services as specified in table 3-2.

3-9. Touchup Painting

When the finish on any metal parts of the equipment has been scarred, damaged, or corroded, lightly send it with fine sandpaper and clean the surface down to bare metal. Apply a light coat of paint, forest green per MIL-E-52798A to all exposed metal surfaces. Refer to the applicable cleaning and refinishing practices specified in TB 43-0118.

3-10. Cable Maintenance

a. Cable maintenance is divided into two steps: troubleshooting and repair. Troubleshooting locates the cable defect to be repaired. The repair step corrects the defect. Possible defects to look out for are: open cable conductors, cable conductors that are shorted together, broken or misaligned connector pins, and broken or cracked connector shells. Except for the shorted or open conductors, other defects are found by close visual inspection of the cable assembly. The shorted or open conductors must be located by use of Multimeter AN/URM-105.

WARNING

When performing continuity checks avoid the hazard of electrical shock by disconnecting the power cable from side of power junction box.

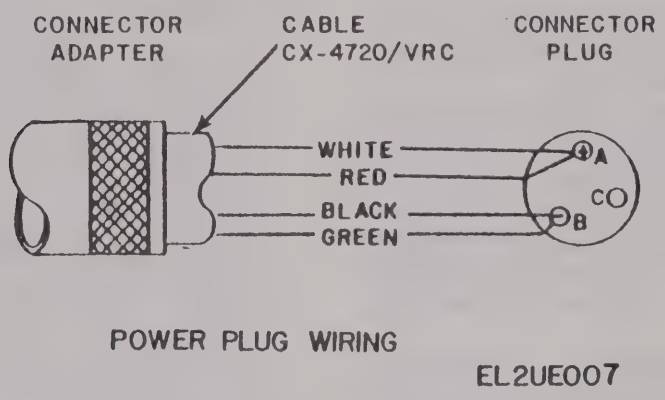

Figure 3-1. Cable Assembly CX-4720/VRC, wiring diagram.

b. Techniques to locate shorted or open cable conductors vary according to the length and accessibility of the cable. The installation kit cables are short and readily accessible; therefore, they should be checked from connector to connector. If the meter indicates zero or low (less than 1 or 2 ohms) the wire has continuity. Shorted wires are located by placing the ohmmeter leads on pins or socket that are shown on the cable schematic to have no connection. For Cable Assembly CX-4720/VRC disconnect the cable from the junction box. Measure continuity of each wire. If a wire is found defective replace the entire cable.

c. When an open or short is located in a cable, flex segments of the cable along its length while the ohmmeter is the circuit. When the ohmmeter shows intermittent short or open in unison with the cable segment being flexed, the area of the cable fault has been located. Replace faulty cable.

3-11. Replacement of Lamp in Switchbox Assembly

a. Turn lampholder assembly counterclockwise and remove from switchbox.

b. Remove defective lamp from lampholder and replace with new lamp.

c. Reassemble lampholder assembly to switchbox by turning assembly clockwise until finger tight.

APPENDIX A
REFERENCES

AR 700-58	Report of Packaging and Handling Deficiencies.
AR 755-2	Disposal of Excess, Surplus, Foreign Excess, Captured, and Unwanted Materiel.
DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply, Manuals/ (types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310-7	U.S. Army Equipment Index of Modification Work Orders.
DOD 4160-.21-M-1	The Defense Disposal Manual Restructured.
SB 11-131	Vehicular Radio Sets and Authorized Installations.
SB 11-628	Headset, Electrical, H-251B/U
SB 38-100	Preservation, Packaging, Packing, and Marking Materials, Supplies, and Equipment used by the Army.
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment, Including Camouflage Pattern Painting of Electrical Equipment Shelters.
TB SIG 291	Safety Measures to be Observed When Installing and Using Whip Antennas, Field Type Masts, Towers, Antennas and Metal Poles that are used with Communications, Radar and Direction Finder Equipment.
TM 11-5820-401-12	Operator's and Organizational Maintenance Manual Including Repair Parts and Special Tools Lists Radio Sets AN/VRC-12 (5820-00-223-7412), AN/VRC-43 (5820-00-223-7415), AN/VRC-44 (5820-00-223-7417), AN/VRC-45 (5820-00-223-7418), AN/VRC-46 (5820-00-223-7433), AN/VRC-47 (5820-00-223-7434), AN/VRC-48 (5820-00-223-7435), AN/VRC-49 (5820-00-223-7437), AN/VRC-54 (5820-00-223-7567), and AN/VRC-55 (5820-00-402-2265), Mounting MT-1029/VRC (5820-00-893-1323) and Mounting MT-1898/VRC (5820-00-893-1324); Antenna AT-912/VRC (5820-00-897-6357); Control, Frequency Selector C-2742/VRC (5820-00-892-3343) and Control, Radio Set C-2299/VRC (5820-00-892-3340)
TM 11-5985-230-14P	Operator's, Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Mast Base AB-15/GR
TM 11-5965-255-15P	Operator, Organizational, Field and Depot Maintenance Repair Parts and Special Tool Lists: Loudspeaker, Permanent Magnet LS-454/U.
TM 11-5985-262-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tool Lists: Antenna AS-1729/VRC. Changes 1-3.
TM 11-6625-203-12	Operator and Organizationl Maintenance: Multimeter AN/URM-105, Including Multimeter ME-77/U.
TM 38-750	The Army Maintenance Management System (TAMMS).
TM 750-244-2	Procedures for Destruction of Electronic Materiel to Prevent Enemy Use, (Electronics Command).

APPENDIX B

COMPONENTS OF END ITEM LIST

Section I. INTRODUCTION

B-1. Scope

a. This appendix lists integral components of and basic issue items for Installation Kit MK-1810/VRC-47 and Remote Audio Kit MK-1870/VRC-47.

B-2. Section II. Integral Components of the End Item

These items, when assembled, comprise the MK-1810/VRC-47 and must accompany it whenever it is transferred or turned in. The illustrations will help in identifying the items.

B-3. Section III. Basic Issue Items (Not applicable)

B-4. Explanation of Columns

a. *Illustration.* This column is divided as follows:

(1) *Figure Number.* Indicates the figure number of the illustration on which the item is shown.

(2) *Item Number.* The number used to identify the item called out in the illustration.

b. *National Stock Number (NSN).* Indicates the NSN assigned to the item and which will be used for requisitioning.

c. *Part Number.* Indicates the primary number used by the manufacturer, which controls the design and characteristics of the item by means of its engineering, drawings, specifications, standards, and inspection requirements to identify an end item or range of items.

d. *Description.* Indicates the Federal Item Name and if requuired, a minimum description to identify the end item.

e. *Location.* The physical location of each item listed is given in this column. The lists are designed to inventory all items in one area of the major item before moving on to an adjacent item.

f. *Usable on Code.* Not applicable.

g. *Quantity Required (Qty Reqd).* This colum lists the quantity of each item required for a complete major item.

h. *Quantity.* This column is left blank for use during an inventory. Under the Rcv'd Column, list the quantity you actually receive on your major item. The Date columns are for use when you inventory the major item at a later date, such as shipment to another site.

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER (FSCM)	(4) LOCATION	(5) USABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
E-1	1		Antenna Tip Assembly SCC446040 (80063)			1		
E-1	6		Support Assembly SCD189023 (80063)			2		
E-1	7	5325-00-926-1394	Grommet Plastic Edge (Narrow) MS212663N (96906)			1		
E-1	8	5325-00-238-6037	Grommet Plastic Edge (Wide) MS212667N (96906)			1		
E-1	9		Mounting MT-1898/VRC PPL1591 (80063)			1		
E-1	12	5820-00-856-9165	Audio Accessory Support Kit PPL1843 (80063)			1		
E-1	13	5984-00-221-5544	Mast, Base AB15/GR SCDL100581 (80063)			1		
E-1	16		Cable Assembly. R.F. CG-17738 (12 ft) SMD415563 (80063)			1		
E-1	20		Cable Assembly, S.P. CX-4722A (8 ft) SMD415552 (80063)			1		
E-1	21		Mast Section MS-116A SCDL100588 (80063)			1		
E-1	22		Mast Section MS-117A SCDL10588 (80063)			1		
E-1	23		Mast Section MS-118A SCDL100588 (80063)			1		
E-1	24	5820-00-893-1323	Mounting MT-1029/VRC PPL1590 (80063)			1		
E-1	26		Cable Assembly, R.F. CG-1773B (8 ft) SMD415563 (80063)			1		
E-1	27		Cable Assembly, Power Elec, CX-4721/VRC (4 ft) SMD415551 (80063)			1		
E-1	28		Cable Assembly, Power Elec, CX-4720/VRC (4 ft) SMD415550 (80063)			1		
E-1	29		Adapter, Connector DLSCA33942 (80063)			1		
E-1	30		Clamp Strap Kit PPL914 (80063)			1		
E-1	31		Headset, Electrical H251B/U			1		
E-1	32		Microphone, Dynamic M-80C/U			1		

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER (FSCM)	(4) LOCATION	(5) USABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
E-1	7	5325-00-926-1394	Grommet Plastic Edge (Narrow) MS212663N (96906)			1		
E-1	8	2325-00-238-6037	Grommet Plastic Edge (Wide) MS212667N (96906)			1		
E-1	16		Cable Assembly, R.F. CG-1773B (12 ft) SMD415563 (80063)			1		
E-1	20		Cable Assembly, S.P. CX-4722A (8 ft) SMD415552 (80063)			1		
E-1	26		Cable Assembly, R.F. CG-1773B (8 ft) SMD415563 (80063)			1		

(1) ILLUSTRATION (A) FIG NO.	(1) ILLUSTRATION (B) ITEM NO.	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER (FSCM)	(4) LOCATION	(5) USABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
E-2	1	5820-00-752-5738	Clamp Strap Kit PPL914 (96906)			1		
E-2	2		Cable Assembly, S.P. CX-7867/VRC (13 ft) SCC75885 (80058)			1		
E-2	3	5930-01-017-5661	Switch Box Assembly DLSCB90890 (80063)			1		
E-2	4		Cable Assembly, S.P. CX-4723/VRC (1 ft 6 in) SMD415553 (80058)			1		
E-2	8	5820-00-856-9165	Audio Accessory Support Kit PPL1843 (80063)			1		
E-2	9	5820-00-892-3340	Control, Radio Set C-2299/VRC MIL-C-55126 (80058)			1		
E-2	10		Loudspeaker, Permanent Magnet MIL-L-]2632 (80058)			2		
E-2	11		Cable Assembly, S.P. CX-4723/VRC (13 ft) SMD415553 (80058)			1		
E-2	12	5975-00-133-8696	Sheet Metal Screw Clamp Kit PPL2183 (96906)			1		
E-2	13	5325-00-926-1394	Grommet Plastic Egde (Narrow) MS212663N (96906)			2		
E-2	14	5820-00-078-3895	Strap, Tie-Down Plastic MS-3367-69 (96906)			6		
E-2	15		Grommet Plastic Edge (Wide) MS21266-7N			2		

APPENDIX C

ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

C-1. Scope

This appendix lists additional items you are authorized for the support of the MK-1810/VRC-47.

C-2. General

This list identifies items that do not have to accompany the MK-1810/VRC-47 and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

C-3. Explanation of Listing.

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment.

(1) NATIONAL STOCK NUMBER	(2) DESCRIPTION PART NUMBER AND FSCM USABLE ON CODE	(3) UNIT OF MEAS	(4) QTY AUTH
5133-00-889-1905	Drill Bit, 11/32" with 1/4" Shank, GGG D751, 81348	EA	1
5133-00-889-1975	Drill Bit, 9/32" with 1/4" Shank, GGG D751, 81348	EA	1
3455-00-187-2630	Hole Saw, 2 1/8" (or equivalent) with 1/4" Shank, 81348	EA	1

APPENDIX D

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

D-1. General

a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.

b. The Maintenance Allocation Chart (MAC) in Section II designates overall responsibility for the performance of maintenance functions on the identified end item or component. The implementation of the maintenance functions upon the end item or component will be consistent with the assigned maintenance functions.

c. Section III lists the special tools and test equipment required for each maintenance function as referenced in Section II.

d. Section IV contains supplemental instructions on explanatory notes for a particular maintenance function.

D-2. Maintenance Functions

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. Adjust. To maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of implacing, seating, or fixing into position an item, part, or module (component or assembly) in a manner to allow the proper functioning of the equipment/system.

h. Replace. The act of substituting a serviceable like-type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services or other maintenance actions to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (services/actions) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e. DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like-new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipment/components.

D-3. Column Entries Used in the MAC

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see para D-2.)

d. Column 4, Maintenance Level. Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance

levels, appropriate "work time" figures will be shown for each level. The number of manhours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, conponent, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

C ..... Operator or crew.
O ..... Organizational maintenance.
F ..... Direct support maintenance.
H ..... General support maintenance.
D ..... Depot maintenance.

e. Column 5, Tools and Equipments. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains letter codes in alphabetic order which are keyed to the remarks contained in Section IV.

D-4. Column Entries Used in Tool and Test Equipment Requirements

a. Column 1, Tool or Test Equipment Reference Code. The tool and test equipment reference code correlates with a maintenance function on the identified end item or component.

b. Column 2, Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

c. Column 3, Nomenclature. Name or identification of the tool or test equipment.

d. Column 4, National/NATO Stock Number. The National or NATO stock number of the tool or test equipment.

e. Column 5, Tool Number. The manufacturer's part number.

D-5. Explanation of Columns in Section IV

a. Reference Code. The code scheme recorded in column 1, Section III.

b. Remarks. This column lists information pertinent to the maintenance function being performed as indicated on the MAC, Section II.

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQPT.	(6) REMARKS
			C	O	F	H	D		
00	INSTALLATION KIT ELECTRONIC EQUIPMENT MK-1810/VRC-47	Install			3.0			2,3,4,5	A
		Inspect	.25						
		Service	.20						
	AND	Replace		1.0				1,2	
		Repair		1.0				1,2	
	INSTALLATION KIT ELECTRONIC EQUIPMENT (REMOTE AUDIO KIT MK-1870/VRC)	Install			3.0			2,3,4,5	A
		Inspect	.25						
		Service	.20						
		Replace		1.0					
		Repair		1.0					
01	Installation Kit Electronic Equipment (Difference Kit for MK-1810/VRC)	Install			3.0				A
		Inspect	.25						
		Service	.20						
		Replace		1.0					
		Repair		1.0					
02	Mounting, MT-1029/VRC			#					B
03	Control, Radio Set C-2299/VRC			#					B
04	Switch Box Assembly	Replace		.15				3	
		Repair		.30				2,3	
05	Mounting MT-1898/VRC			#					B

SECTION III TOOL AND TEST EQUIPMENT REQUIREMENTS
FOR

INSTALLATION KIT, ELECTRONIC EQUIPMENT MK-1810/VRC-47 AND MK-1870/VRC-47

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
1	O	TOOL KIT TK-101/G, 80058	5180-00-064-5178	
2	O,F	MULTIMETER AN/USM-223, 80058	6625-00-999-7465	
3	F	TOOL KIT TK-100/G, 80058	5180-00-605-0079	
4	F	HOLE SAW, 2 1/8" 81348	3455-00-187-2630	
5	F	PILOT HOLDER 81348	3460-00-393-1737	

SECTION IV. REMARKS

REFERENCE CODE	REMARKS
A	Repair by component replacement
B	Refer to TM 11-5820-401-12

APPENDIX E

ORGANIZATIONAL, AND DIRECT SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

Section I

INTRODUCTION

E-1. Scope

This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational and direct support maintenance of Installation Kit, Electronic Equipment MK-1810/VRC and Difference Kit (NSN 5820-01-022-6288). It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

E-2. General

This Repair Parts and Special Tools List is divided into the following section:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.

b. Section III. Special Tools List. Not applicable.

c. Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list, in alphanumeric sequence, of all part numbers appearing in the listing. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

E-3. Explanation of Columns

a. Illustration. This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown.

(2) *Item number.* The number used to identify item called out in the illustration.

b. Source, Maintenance, and Recoverability (SMR) Codes.

(1) Source code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code *Definition*

PA–Item procured and stocked for anticipated or known usage.

PB–Item procured and stocked for insurance purpose because essentiality dictates that a minimum quantity be available in the supply system.

PD–Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.

XD–A support item that is not stocked. When required, item will be procured through normal supply channels.

(3) *Recoverability code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

Recoverability Codes *Definition*

Z–Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

D–Reparable item. When beyond lower level repair capability return to Depot. Condemnation and disposal not authorized below Depot level.

c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

d. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When a stock-numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly.

E-4. Special Information

a. Usable on codes are shown in the description column. Uncoded items are applicable to all models. Identification of the Usable Codes used in this publication are:

Code	*Used on*
DGO	Installation Kit, Electronic Equipment MK-1810/VRC-47

b. National Stock Numbers (NSN's) that are missing from P Source Coded items have been applied for and will be added to this TM by future Change/Revision when they are entered in the Army Master Data File (AMDF). Until the NSN's are established and published, submit exception requisitions to: Commander US Army Electronics Command, ATTN: DRSEL-MM, Fort Monmouth, New Jersey 07703 for the part required to support your equipment.

E-5. How to Locate Repair Parts

a. When National stock number or part number is unknown:

(1) *First.* Using the table of contents, determine the functional group within which the item belongs. This is necessary since illustrations are prepared for functional groups and listings are divided into the same group.

(2) *Second.* Find the illustration covering the functional group to which the item belongs.

(3) *Third.* Identify the item on the illustration and note the illustration figure and item number of the item.

(4) *Fourth.* Using the Repair Parts Listing, find the figure and item number noted on the illustration.

b. When National stock number or part number is known.

(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence, cross-referenced to the illustration figure number and item number.

(2) *Second.* After finding the figure and item number, locate the figure and item number in the repair parts list.

E-6. Abbreviations

(Not applicable)

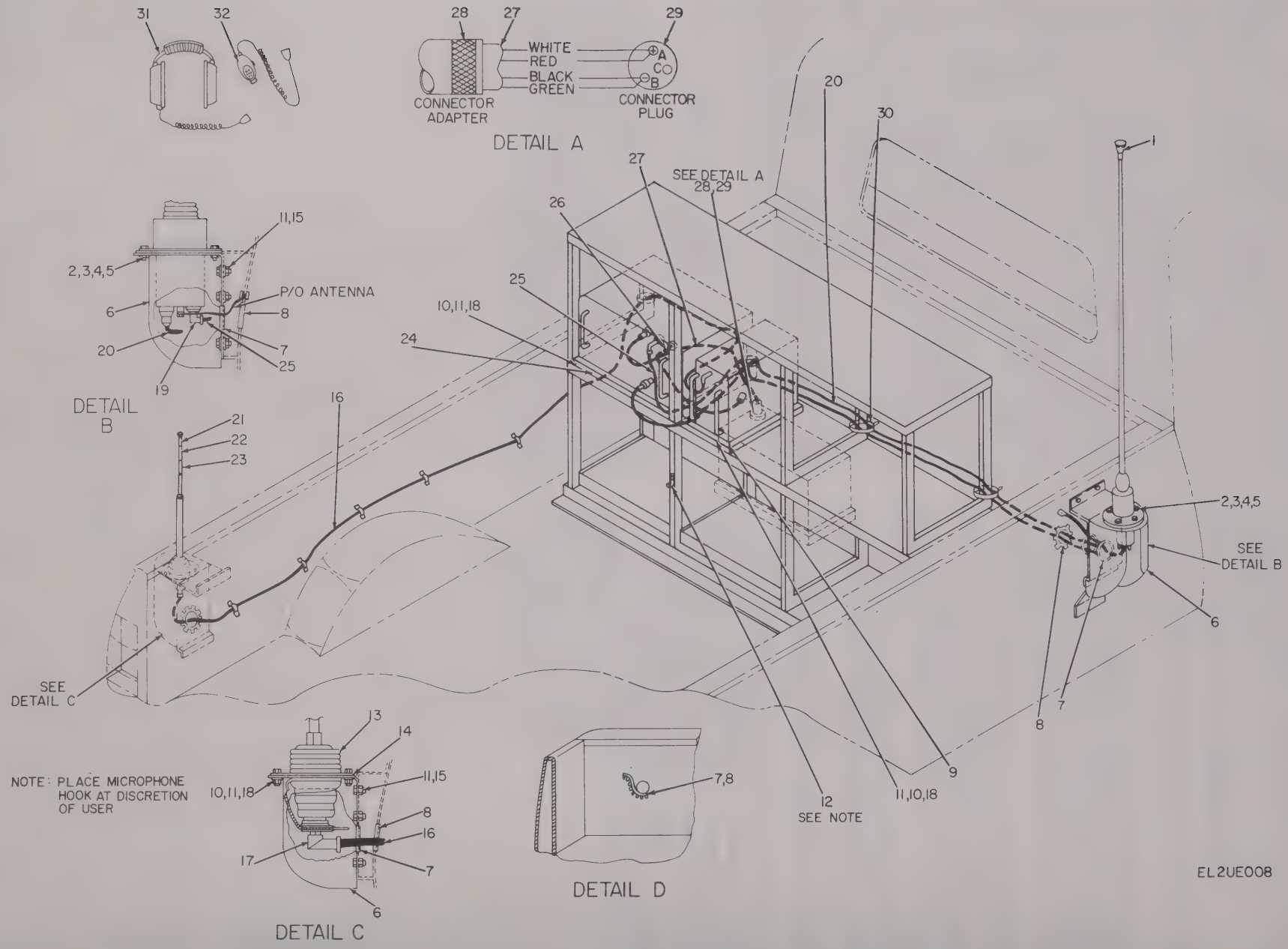

Figure E-1. Installation Kit, Electronic Equipment MK-1810/VRC-47.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 00 INSTALLATION KIT,ELECTRONIC EQUIPMENT MK-1810/VRC-47		
E-1	1	PAOZZ		SCC446040	80063	ANTENNA TIP ASSY.....DGO.DGW	EA	1
E-1	2	XDFZZ		MS51967-37	96906	NUT,HEX HEAD.....DGO,DGW	EA	4
E-1	3	XDFZZ	5305-00-269-2808	MS90726-65	96906	SCREW,CAP,HEXAGON H.....DGO,DGW	EA	4
E-1	4	XDFZZ	5310-00-061-1258	MS45904-76	96906	WASHER,LOCK.....DGO,DGW	EA	4
E-1	5	XDFZZ	5310-00-637-9541	MS35338-27	96906	WASHER,LOCK.....DGO,DGW	EA	4
E-1	6	PBOZZ	5820-00-740-1780	SC-D-189023	80063	SUPPORT ASSEMBLY.....DGO	EA	2
E-1	7	PAOZZ	5325-00-926-1394	MS21266-3N	96906	GROMMET,PLASTIC.....DGO,DGW	EA	1
E-1	8	PAOZZ	5325-00-238-6037	MS21266-7N	96906	GROMMET PLSTC EDGE.....DGO,DGW	EA	1
E-1	9	PDODD		MT/898/VRC	80058	MOUNTING.....DGO	EA	1
E-1	10	XDFZZ	5310-00-880-7746	MS51968-5	96906	NUT,PLAIN,HEXAGON.....DGO,DGW	EA	13
E-1	11	XDFZZ	5305-00-068-0502	MS90725-6	96906	SCREW,CAP,HEXAGON H.....DGO	EA	12
E-1	12	PBOZZ	5820-00-856-9165	PP-L-1843	80063	SUPPORT KIT.....DGO	EA	1
E-1	13	PDODD	5985-00-221-5544	AB15GR	80058	BASE,MAST.....DGO	EA	1
E-1	14	PAFZZ	5820-00-493-3043	SCC446400	80063	ADAPTER ASSEMBLY.....DGO	EA	1
E-1	15	XDFZZ	5310-00-889-2528	MS45904-68	96907	WASHER,LOCK.....DGO,DGW	EA	12
E-1	16	PAFZZ	5995-00-823-2986	CG1773BU	80058	CABLE ASSY RF 12FT.....DGO,DGW	EA	1
E-1	17	PAOZZ	5935-00-149-3534	UG273U	80058	ADAPTER.....DGO	EA	1
E-1	18	XDFZZ	5310-00-889-2527	MS45904-72	96906	WASHER,LOCK.....DGO,DGW	EA	13
E-1	19	PAOZZ	5935-01-032-5404	UG306U	80058	ADAPTER,CONNECTOR.....DGO	EA	1
E-1	20	PAFZZ		CX4722A	80058	CABLE ASSEMBLY.....DGO,DGW	EA	1
E-1	21	PAOZZ		MS116A	80058	MAST SECTION.....DGO	EA	1
E-1	22	PAOZZ	5985-00-115-7149	MS117A	80058	MAST SECTION.....DGO	EA	1
E-1	23	PAOZZ	5310-00-836-2458	MS118A	80058	WASHER,LOCK.....DGO	EA	1
E-1	24	PDODD	5820-00-893-1323	MT1029VRC	80058	MOUNTING.....DGO	EA	1
E-1	25	XDFZZ	5306-00-225-9087	MS90726-32	96906	BOLT MACHINE.....DGO,DGW	EA	13
E-1	26	PAFZZ	5995-00-823-2986	CG1773BU	80058	CABLE ASSY RF 8FT.....DGO,DGW	EA	1
E-1	27	PAFZZ		CX4721/VRC	80058	CABLE ASSEMBLY 4FT.....DGO	EA	1
E-1	28	PAFZZ		CX4720/VRC	80058	CABLE ASSEMBLY 4FT.....DGO,DGW	EA	1
E-1	29	PAOZZ	5935-00-892-8931	DL-S-CA339542	80063	ADAPTER,CABLE CLAMP.....DGO,DGW	EA	1
E-1	30	PAOZZ	5935-00-856-8426	SM-C-632655	80063	CONNECTOR,PLUG,ELEC.....DGO,DGW	EA	1
E-1	31	PBOZZ	5820-00-752-5738	PPL914	80063	HARDWARE KIT,ELECTR.....DGO	EA	1
E-1	32	PAOZZ	5965-00-179-7762	M80C/U	80058	MICROPHONE,DYNAMIC.....DGO	EA	1
E-1	33	PAOZZ		H251B/U	05800	HEADSET,ELEC.....DGO	EA	1

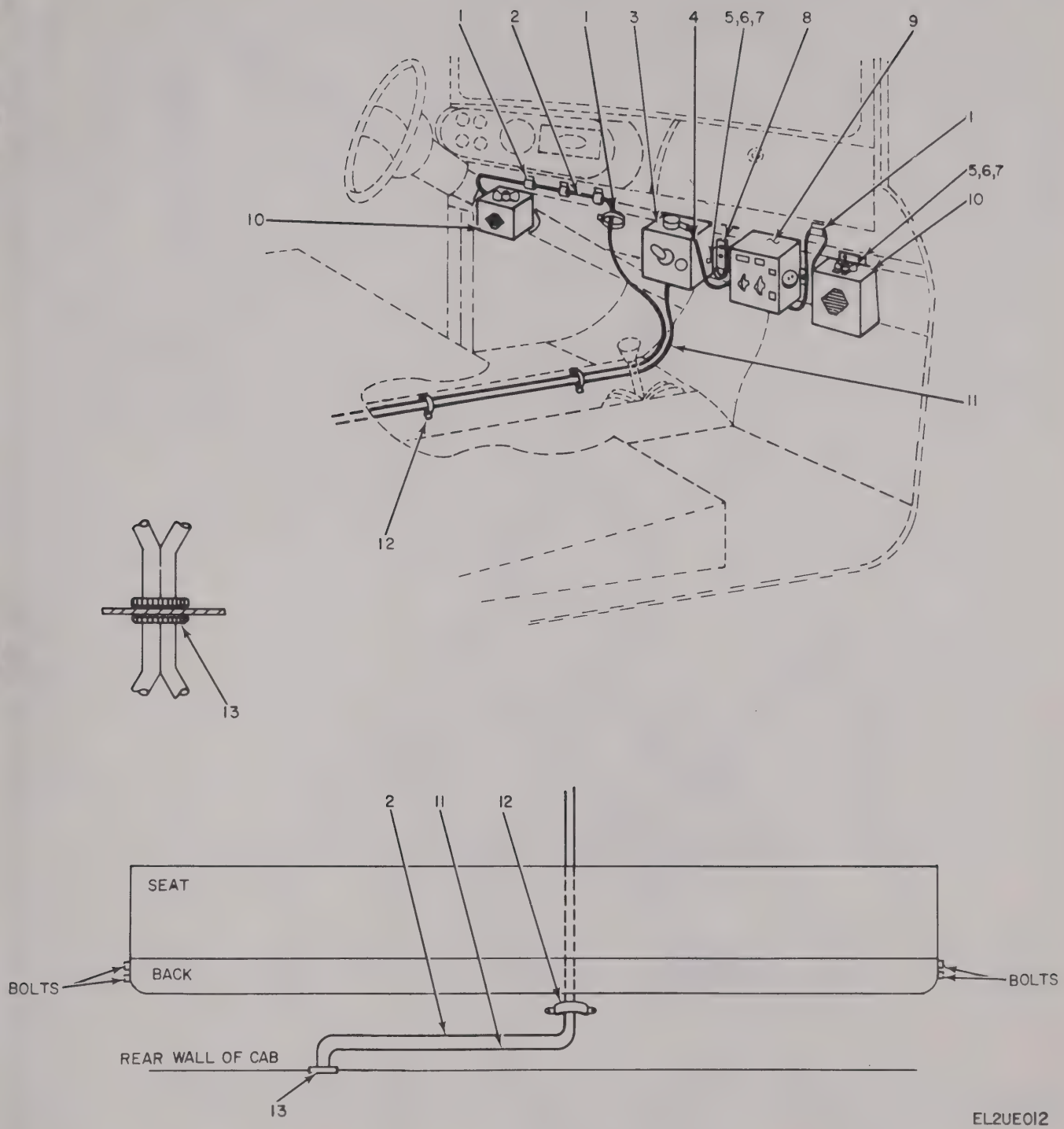

Figure E-2. Installation Kit, Electronic Equipment (Remote Audio Kit) MK-1870/VRC-47 (Sheet 1 of 2).

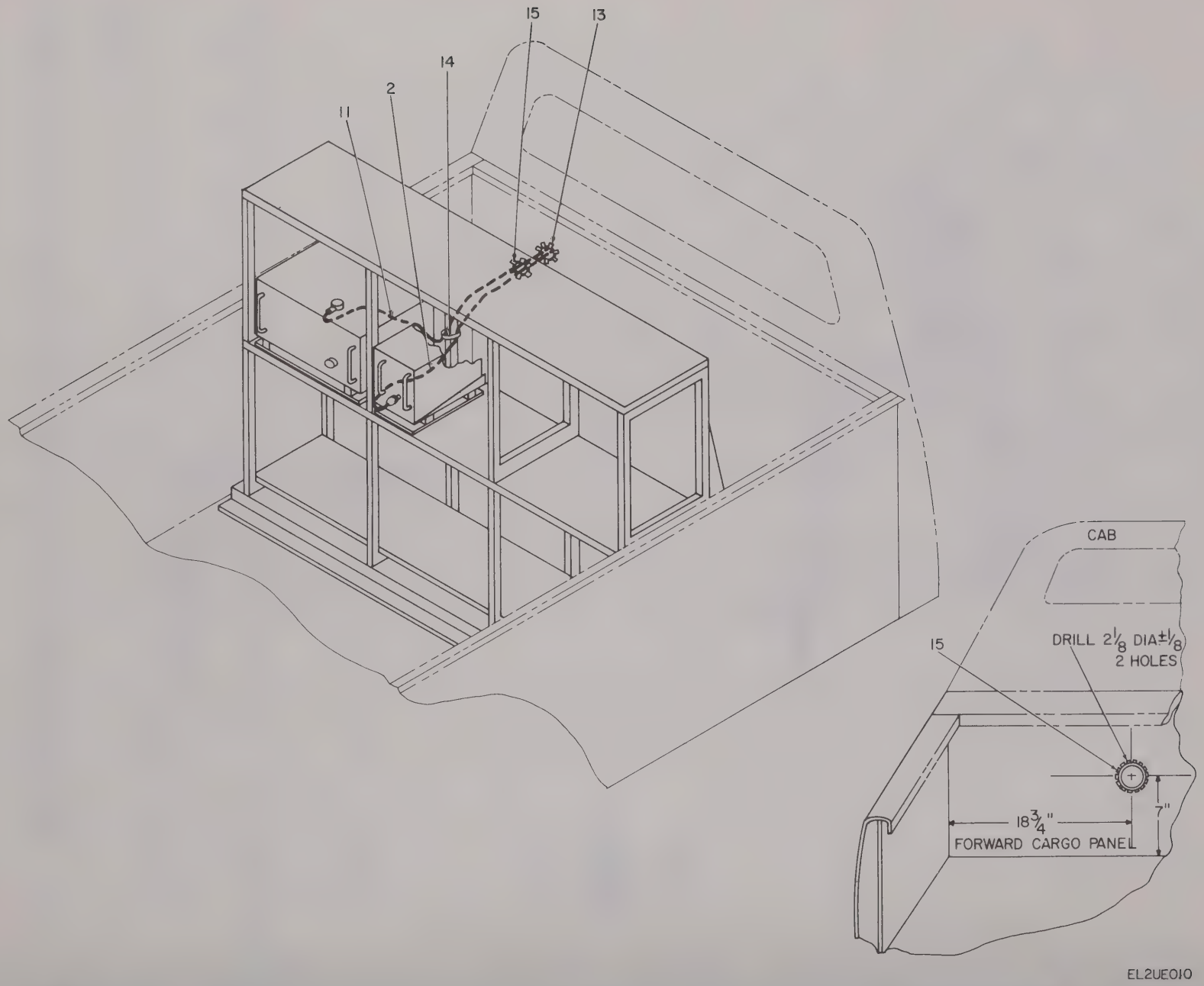

Figure E-2. Installation Kit, Electronic Equipment (Remote Audio Kit) MK-1870/VRC-47 (Sheet 2 of 2).

(1) ILLUSTRATION (a) FIG NO	(1) ILLUSTRATION (b) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 00 INSTALLATION KIT, ELECTRONIC EQUIPMENT (REMOTE AUDIO KIT) MK-1870/VRC-47		
E-2	1	PBOZZ	5820-00-752-5738	PPL914	96906	HARDWARE KIT,ELECTR.....DKQ	EA	1
E-2	2	PAFZZ		CX7867VRC13FT	80058	CABLE ASSY SP PRP.....DKQ	EA	1
E-2	3	PAFFF	5930-01-017-5661	DL-S-CB690890	80063	SWITCH BOX ASSEMBLY.....DKQ	EA	1
E-2	4	PAFZZ		CX4723VRC6IN	80058	CABLE ASSY SP PRP.....DKQ	EA	1
E-2	5	XDFZZ	5305-00-225-3843	MS90728-8	96906	SCREW,CAP,HEXAGON H.....DKQ	EA	6
E-2	6	XDFZZ	5310-00-933-8121	MS35338-139	96906	WASHER,LOCK.....DKQ	EA	12
E-2	7	XDFZZ	5310-00-768-0319	MS51968-2	96906	NUT,PLAIN,HEXAGON.....DKQ	EA	6
E-2	8	PBOZZ	5820-00-856-9165	PP-L-1843	80063	SUPPORT KIT.....DKQ	EA	1
E-2	9	PDODD	5820-00-892-3340	C2299VRC	80058	CONTROL,RADIO SET.....DKQ	EA	1
E-2	10	PDODD	5965-00-115-7149	LS454U	80058	LOUDSPEAKE.....DKQ	EA	2
E-2	11	PAFZZ		CX4723VRC	80058	CABLE ASSY,SP.....DKQ	EA	1
E-2	12	PAOZZ	5975-00-133-8696	MS3367-6-9	96906	STRAP,TIEDOWN,ELECT.....DKQ	EA	6
E-2	13	PAOZZ	5325-00-926-1394	MS21266-3N	96906	GROMMET,PLASTIC.....DKQ	EA	2
E-2	14	PAOZZ	5820-00-078-3895	PPL2183	96906	SCREW CLAMP KIT.....DKQ	EA	1
E-2	15	PAOZZ	5325-00-238-6037	MS21266-7N	96906	GROMMET,PLASTIC EDG.....DKQ	EA	2

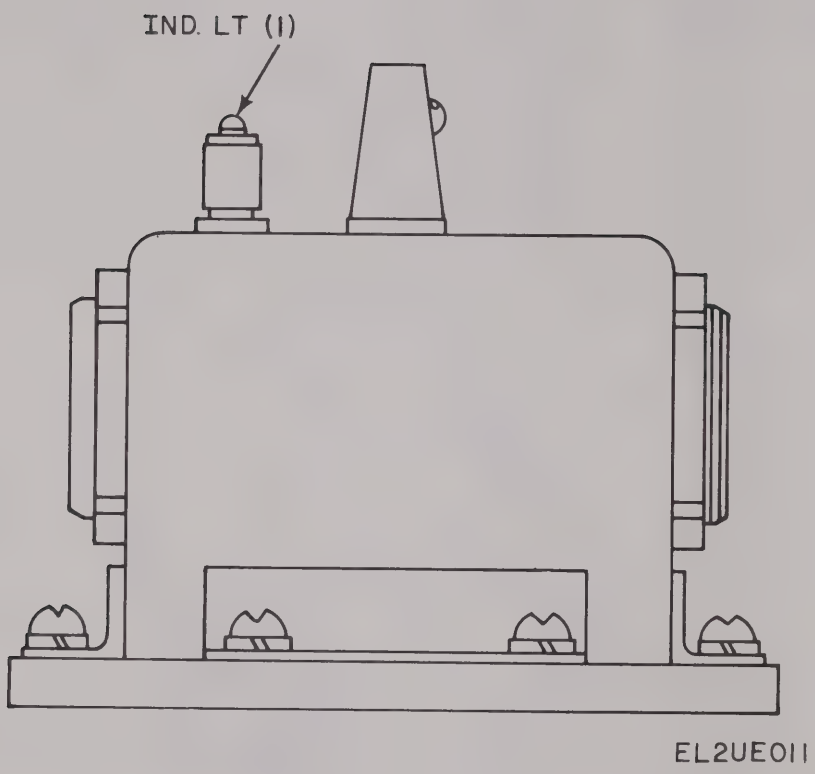

Figure E-3. Switch Box Assembly.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						04 SWITCH BOX ASSEMBLY		
E-3	1	PAFZZ		SMC415155	80063	LIGHT,INDICATOR.....DKQ	EA	1

SECTION IV NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NOTE: LATEST NATIONAL STOCK NUMBER AND PART NUMBER ASSIGNMENTS ARE INCLUDED AT END OF INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.
5310-00-061-1258	E-1	4
5305-00-068-0502	E-1	11
5820-00-078-3895	E-2	14
5975-00-133-8696	E-2	12
5935-00-149-3534	E-1	17
5965-00-179-7762	E-1	32
5985-00-221-5544	E-1	13
5305-00-225-3843	E-2	5
5306-00-225-9087	E-1	25
5325-00-238-6037	E-1	8
5325-00-238-6037	E-2	15
5305-00-269-2808	E-1	3
5820-00-493-3043	E-1	14
5310-00-637-9541	E-1	5
5820-00-740-1780	E-1	6
5820-00-752-5738	E-1	31
5820-00-752-5738	E-2	1
5310-00-768-0319	E-2	7
5310-00-836-2458	E-1	23
5935-00-856-8426	E-1	30
5820-00-856-9165	E-1	12
5820-00-856-9165	E-2	8
5310-00-880-7746	E-1	10
5310-00-889-2527	E-1	18
5310-00-889-2528	E-1	15
5820-00-892-3340	E-2	9
5935-00-892-8931	E-1	29
5820-00-893-1323	E-1	24
5325-00-926-1394	E-1	7
5325-00-926-1394	E-2	13
5310-00-933-8121	E-2	6
5930-01-017-5661	E-2	3
5935-01-032-5404	E-1	19

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
AB15GR	80058	E-1	13
CX4720/VRC	80058	E-1	28
CX4721/VRC	80058	E-1	27
CX4722A	80058	E-1	20
CX4723VRC	80058	E-2	11
CX4723VRC6IN	80058	E-2	4
CX7867VRC13FT	80058	E-2	2
C2299VRC	80058	E-2	9
DL-S-CA339542	80063	E-1	29
DL-S-CB690890	80063	E-2	3
H251B/U	05800	E-1	33
LS454U	80058	E-2	10
MS116A	80058	E-1	21
MS117A	80058	E-1	22
MS118A	80058	E-1	23
MS21266-3N	96906	E-1	7
MS21266-3N	96906	E-2	13
MS21266-7N	96906	E-1	8
MS21266-7N	96906	E-2	15
MS3367-6-9	96906	E-2	12
MS35338-139	96906	E-2	6
MS35338-27	96906	E-1	5
MS45904-68	96906	E-1	15
MS45904-72	96906	E-1	18
MS45904-76	96906	E-1	4
MS51967-37	96906	E-1	2
MS51968-2	96906	E-2	7
MS51968-5	96906	E-1	10
MS90725-6	96906	E-1	11
MS90726-32	96906	E-1	25
MS90726-65	96906	E-1	3
MS90728-8	96906	E-2	5
MT/898/VRC	80058	E-1	9
MT1029VRC	80058	E-1	24
M80C/U	80058	E-1	32
PP-L-1843	80063	E-1	12
PP-L-1843	80063	E-2	8
PPL2183	96906	E-2	14
PPL914	80063	E-1	31
PPL914	96906	E-2	1
SC-D-189023	80063	E-1	6
SCC446040	80063	E-1	1
SCC446400	80063	E-1	14
SM-C-632655	80063	E-1	30
SMC415155	80063	E-3	1
UG273U	80058	E-1	17
UG306U	80058	E-1	19

LATEST NATIONAL STOCK NUMBER ASSIGNMENTS

STOCK NUMBER	FIG. NO.	ITEM NO.
5985-00-115-7149	E-1	22
5995-00-823-2986	E-1	16
5995-00-823-2986	E-1	26

LATEST PART NUMBER ASSIGNMENTS

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
CG1773BU	80058	E-1	16
CG1773BU	80058	E-1	26

APPENDIX F

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

F-1. Scope

This appendix lists expendable supplies and materials you will need to operate and maintain the MK-1810/VRC-47. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts,and Heraldic Items).

F-2. Explanation of Columns

a. Column 1-Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App "F").

b. Column 2-Level. This column identifies the lowest level of maintenance that requires the listed item.

C–Operator/Crew
O–Organizational Maintenance
F–Direct Support Maintenance
H–General Support Maintenance

c. Column 3-National Stock Number. This is the National Stock Number assigned to the item; use it to request or requisition the item.

d. Column4-Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parenthesis, if applicable.

e. Column 5-Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION PART NO. AND FSCM	(5) UNIT OF MEAS
1	O	5340-00-906-3666	Brush, Soft Bristled, 153350, 01099	EA
2	O	8305-00-205-3496	Cloth, Cotton Cheesecloth, CCC 440, 81348	EA
3	O	6850-00-984-5853	Compound, Cleaning (Trichlorotrifluorethane). Freon PCA, 18845	EA

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PAGE NO	PARA GRAPH	FIGURE NO	TABLE NO
33			
44		19	
45			

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

For item 2, change the NSN to read: 5835-00-134-9186.
Reason: Accuracy.

Identify the cover on the junction box (item no. 5).
Reason: It is a separate item and is not called out on figure 19.

Add the cover of the junction box as an item in the listing for figure 19.
Reason: Same as above

SAMPLE

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER
SSG I. M. DeSpirit of 999-1776

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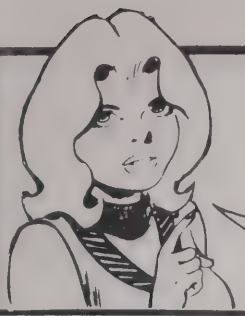

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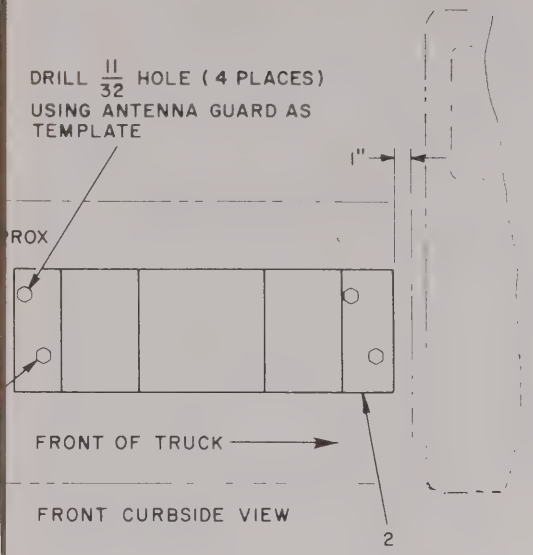
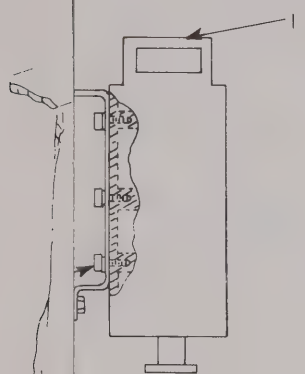


DETAIL A



DETAIL B

NOTE:
ALL DIMENSIONS ARE IN INCHES $\pm \frac{1}{64}$.

	NSN
	5820-00-897-6357 MILA55101 81349
	5820-00-937-7213 SCD446094 80063
X 1-1/2 LG.	5306-00-225-9093- MS90726-38 96906
X 1/2 LG.	5305-00-068-0504 MS90726-3 96906
	5310-00-880-7746 MS51968-5 96906
	5310-00-081-4219 MS27183-12 96906
	5310-00-407-9566 MS35338-45 96906
	5310-00-889-2528 MS45904-68 96906

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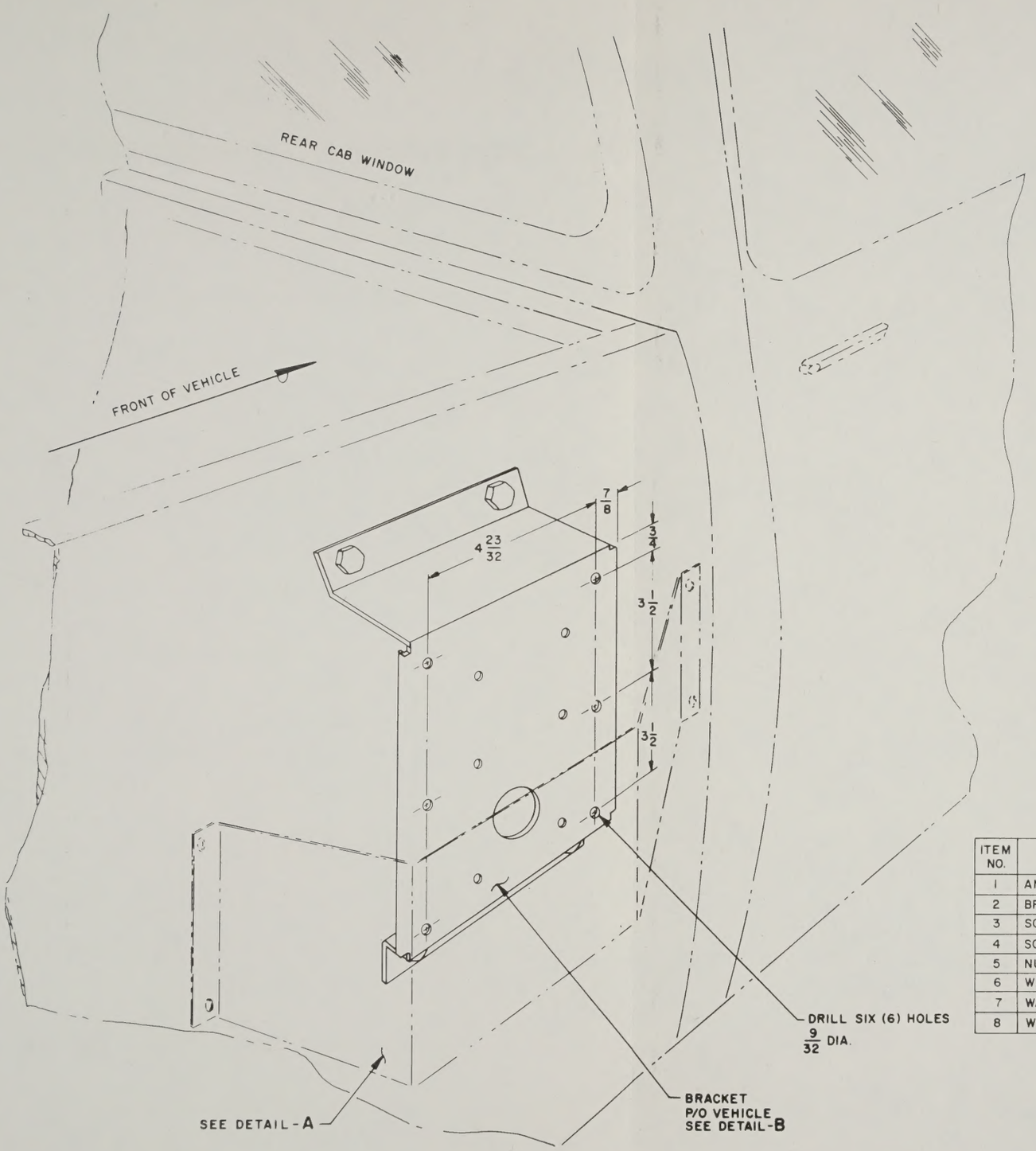

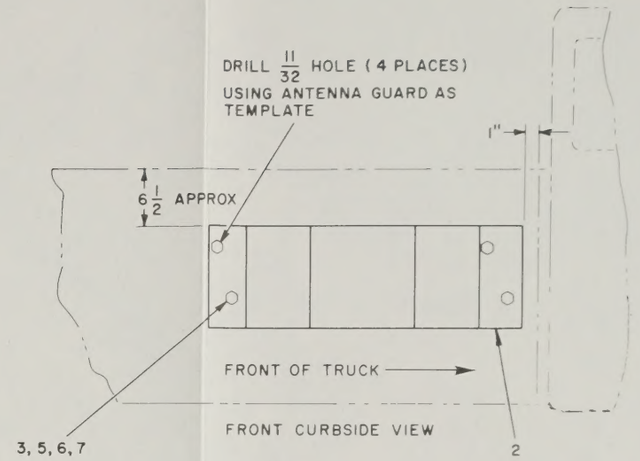

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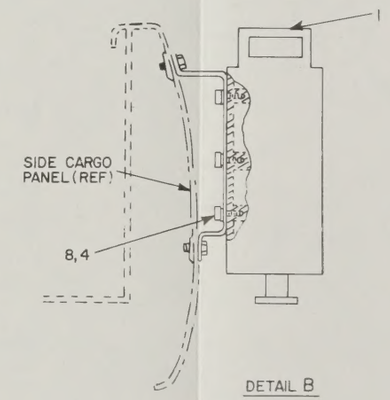

DETAIL B

NOTE:
ALL DIMENSIONS ARE IN INCHES ± 1/64.

ITEM NO.	NAME OF ITEM	NSN
1	ANTENNA AT-912/VRC	5820-00-897-6357 MILA55101 81349
2	BRUSH GUARD ASSEMBLY	5820-00-937-7213 SCD446094 80063
3	SCREW, HEX HD. 5/16-24 X 1-1/2 LG.	5306-00-225-9093- MS90726-38 96906
4	SCREW, HEX HD. 1/4-28 X 1/2 LG.	5305-00-068-0504 MS90726-3 96906
5	NUT, HEX, 5/16-24	5310-00-880-7746 MS51968-5 96906
6	WASHER, FLAT, 5/16	5310-00-081-4219 MS27183-12 96906
7	WASHER, SPLIT LOCK, 5/16	5310-00-407-9566 MS35338-45 96906
8	WASHER, LOCK, I.E.T. 1/4	5310-00-889-2528 MS45904-68 96906

EL2UF005

Figure FO-1 Installation of Antenna AT-912 and Antenna Guard Assembly on M882 or M892 Series Truck

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General, United States Army
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Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

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